

95/03699 A computer model economic comparison of grid and RAPS

Remmer, D. P. *et al.*, *Proc. Solar '94, ANZSES Administrator, PO Box 124, Caulfield East, VIC.3145, Australia.*

A computer package can assist the electricity distribution authorities to compare grid connection costs against the costs of installing stand alone RAPS systems. Discusses the history and development of the model and some of the issues which will arise in regards to further improvements, workshops and training.

95/03700 Dam debt in Tasmania

Blakers, A. *Proc. Solar '94, ANZSES Administrator, PO Box 124, Caulfield East, VIC.3145, Australia.*

The paper examines the Tasmanian electricity system over the past decade, and points out the low risk nature of energy conservation and wind energy as 'new' sources of electricity.

95/03701 Diversity and Ignorance in electricity supply investment: A reply to Andrew Stirling

Lucas, N. *et al.*, *Energy Policy*, Jan. 1995, 23, (1), 5-16.

95/03702 Dry combustion plasma for open-cycle magnetohydrodynamic electricity generation

George, A. M. *Int. J. Energy Res.*, Jun. 1995, 19, (4), 361-363.

Dry combustion plasma (DCP), i.e. plasma produced by seeded combustion of dry fuels such as char, charcoal, petroleum pitch etc. devoid of H₂O, is shown to be a superior medium for open-cycle MHD electricity generation owing to its enhanced electrical conductivity. The calculated conductivity of DCP is about fifty times higher than what has been realized so far in experimental rigs.

95/03703 The dynamic electricity-economic model for remote area electricity supply

Wachjoe, C. K. *et al.*, *Proc. Solar '94, ANZSES Administrator, PO Box 124, Caulfield East, VIC.3145, Australia.*

Describes a system dynamic model which has been developed for demand analysis. A series of complex relationships represents the interaction between electricity supply and demand. The model incorporates the major relationships between the electricity sector and the economy. The electricity supply model is used to assess and study the future development of remote area electricity supply by utilising the availability of local energy sources.

95/03704 Electric power regulation in Mexico

Viqueira Landa, J. *Energy Studies Review*, 1994, 6, (3), 248-253.

The article provides a brief historical description of the electricity sector in Mexico and its regulation, a consideration of the implications of the North American Free Trade Association for that sector, and a brief discussion of the effects of attempting to introduce competition into electricity industries.

95/03705 Electricity pricing – A discussion of discounting methods

Horlock, J. H. *Energy Int. J.*, Apr. 1995, 29, (4), 273-278.

Discusses a method of pricing electricity in which debt repayments are discounted at a separate rate from the returns on equity capital.

95/03706 End use of micro hydro electricity in developing countries: Links between policy, technology and community

Scales, I. *Proc. Solar '94, ANZSES Administrator, PO Box 124, Caulfield East, VIC.3145, Australia.*

Discusses how economic uses of micro hydro electricity generating plants in developing countries remain limited, even while the plant remains operational for years. Details how research can elucidate the links between the policy orientation, micro hydro electricity and the social context in which implementation occurs.

95/03707 Energy efficient lighting in industrial buildings and warehouses

Wilson, A. and Slater, A. *National Lighting Conf., Cambridge, UK, 1994, CIBSE, 154-157.*

Discusses a study carried out over two years looking at energy efficient lighting in industrial and warehouse buildings, with the aim of providing energy efficient lighting installations.

95/03708 Focus on finance. Is the information superhighway the road to success?

Byus, L. C. *Nuclear News*, Apr. 1995, 38, (5), 22-23.

95/03709 Liberalization and environmental policy in the European electricity market

Oosterhuis, F. *Energy Studies Review*, 1994, 6, (3), 226-236.

The paper deals with the environmental aspects of the electricity industry in the European Union against the background of the recent proposals for the liberalization of the European electricity market. These proposals, as well as the main features of the power industry in the EU member states, are discussed. Existing and planned environmental policies for the electricity sector are considered. It is concluded that liberalization as such is not a threat to the environment, and may even create better competitive opportunities for environmentally friendly ways of generating electricity. However, liberalization will have to be accompanied by regulations, incentives and the provision of information in order to stimulate energy saving 'cleaner' power generation and renewables.

95/03710 Life management of power plants

IEE Conference Publication No.401, £45.00, 1994, 248 pp, IEE, London.

The book discusses the life management of power plants which requires understanding of the mechanisms of ageing and failure, and the organisation of activities such as operation, maintenance, refurbishment and upgrading to maximise the returns on the investments.

95/03711 NSW Government Remote Area Power Assistance Scheme

Williams, M. *Proc. Solar '94, ANZSES Administrator, PO Box 124, Caulfield East, VIC.3145, Australia.*

In 1987 the New South Wales Government introduced the Remote Area Power Assistance Scheme (RAPAS) to provide grants to assist residents in remote areas of NSW with the provision of an adequate domestic electricity power supply, either through grid connection or by the purchase of a stand-alone power supply system. The paper reviews the operation of RAPAS, its effectiveness and impact on the remote area power supply industry.

95/03712 The potential study on the use of cool storage system to decrease electrical peak demand in Thailand

Kubana, K. *Proc. Solar '94, ANZSES Administrator, PO Box 124, Caulfield East, VIC.3145, Australia.*

A study on the use of cool storage systems to decrease electrical peak demand which was carried out at four hotels, two shopping centres and two hospitals in Bangkok. The study used a partial ice storage strategy, indicated the electrical peak demand could be reduced by 13.2%, 20.5% and 11.4% in the hotels, shopping centres and hospitals respectively with simple payback times between 0.6-5 years.

95/03713 Powerlink Queensland launched

Queensland Government Min. J., (Queensland Power Australia), May 1995, 96, p. 8.

Reports that the recently formed Queensland Electricity Transmission Corporation (QETC) is now trading as Powerlink Queensland.

95/03714 Reducing the cost of generating electrical power

Bhinder, F. S. and Al-Zubaidy, S. *Int. J. Energy Res.*, Jun. 1995, 19, (4), 309-316.

Aero derivative gas turbine engines are ideally suited as prime movers for generating electricity in areas of serious water shortages such as the Middle East (Arabian peninsula). But the low thermal efficiency of the gas turbine engine has tended to impede its widespread acceptance for this role. In this paper it is shown that a hybrid plant comprising of gas turbine and a vapour turbine can yield efficiencies significantly higher than those attainable by either the diesel or the steam-turbine-driven plant. Such a plant would also reduce the global warming by minimizing the amount of heat rejected to the environment. The study reported shows that the plant efficiency of the combined plant could be raised from 32% to 53%.

95/03715 Tempo – For the better management of electric heating installations

Chaud. Froid. Plomb., Jan. 1995, 49, (565), 71-74. (In French)

Discusses the new Tempo tariff introduced by Electricité de France with the aim of reflecting more closely the costs of production, transport, and distribution of electricity for electric space heating and domestic hot water supply. The new tariff has six price levels – three types of day divided into on-peak and off-peak periods.

95/03716 Who owns whom in lighting

Rea, T. *Elec. Rev.*, Jan. 1995, 228, (2), 25-28.

Reports on the current structure of ownership in the lighting industry and analyses the history of negotiations and acquisitions over the past two years.